

WHAT IS CLAIMED IS:

1. A print system for printing read image data based on specified print setting, said print system comprising:

instruction means for specifying print setting;

5 image read means for reading an original image and converting the image into image data;

compression means for compressing the read image data and storing the compressed data in storage means;

10 decompression means for reading the compressed image data from the storage means and decompressing the data;

image processing means for performing predetermined image processing for the image data based on the specified print setting, thereby preparing print image data; and

15 control means for controlling compression and decompression timings of the image data in response to the contents of the image processing performed by said image processing means.

2. A print system according to claim 1, wherein the  
20 image processing contains enlargement processing and reduction processing of the image data, and wherein

said control means

(1) if the image data undergoes the enlargement processing,

25 (1a) causes said compression means to compress and store

the image data read by said image read means;

(1b) causes said decompression means to decompress the compressed image data; then

(1c) causes said image processing means to perform  
5 enlargement processing of the image data;

(2) if the image data undergoes the reduction processing,

(2a) causes said image processing means to perform reduction processing of the image data read by said image read means; then

10 (2b) causes said compression means to compress and store the image data.

3. A print system according to claim 2, wherein the image processing further contains enlargement split processing  
15 of performing image layout so as to split enlarged image data into a plurality of print record media for printing and reduction integration processing of performing image layout so as to print reduced image data collectively on one print record medium, and wherein

20 said control means

(1) if the image data undergoes the enlargement split processing,

(1a) causes said compression means to compress and store the image data read by said image read means;

25 (1b) causes said decompression means to decompress the

compressed image data; then

(1c) causes said image processing means to perform enlargement processing and enlargement split processing of the image data;

5 (2) if the image data undergoes the reduction integration processing,

(2a) causes said image processing means to perform reduction processing for the image data read by said image read means; then

10 (2b) causes said compression means to compress and store the reduced image data; and

(2c) causes said decompression means to decompress the compressed image data and then causes said image processing means to perform reduction integration processing of the image data.  
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4. A print system according to claim 1, further including determination means for determining whether or not a blank page occurs to perform the enlargement split processing,  
20 wherein if it is determined that a blank page occurs, said control means cancels print of the blank page.

5. A print system according to claim 1, wherein said compression means can compress the image data with more than  
25 one compression quality and selects the compression quality

to be used in response to the contents of the image processing.

6. A print system according to claim 5, wherein said compression means selects compression quality with a small or  
5 no data loss at the decompression time to perform the reduction processing.

7. A print method for printing read image data based on specified print setting, said print method comprising:  
10 an enlargement print process and a reduction print process, wherein

said enlargement print process comprises steps of:  
inputting print setting concerning enlargement print;  
reading an original image and converting the image into  
15 image data;  
compressing the image data and storing the compressed data;  
reading the compressed image data and decompressing the data; and  
20 enlarging the decompressed image data and preparing print image data, and wherein

said reduction print process comprises steps of:  
inputting print setting concerning reduction print;  
reading an original image and converting the image into  
25 image data;

reducing the image data;

compressing the reduced image data and storing the  
compressed data;

reading the compressed image data and decompressing the  
5 data;

preparing print image data based on the decompressed image  
data; and

printing based on the prepared print image data.

10 8. A print method for printing read image data based  
on specified print setting, said print method comprising:  
an enlargement split print process and a reduction integration  
print process, wherein

15 said enlargement split print process comprises steps of:  
inputting print setting concerning enlargement print;  
reading an original image and converting the image into  
image data;

compressing the image data and storing the compressed  
data;

20 reading the compressed image data and decompressing the  
data;

laying out the decompressed image data across pages;  
enlarging the image data on the pages laid out and preparing  
print image data; and

25 printing based on the prepared print image data, and

wherein

said reduction integration print process comprises steps of:

inputting print setting concerning reduction print;

5 reading each original image and converting the image into image data;

reducing the image data;

compressing the reduced image data and storing the compressed data;

10 reading the compressed image data and decompressing the data;

laying out the decompressed image data on one page and preparing print image data; and

printing based on the prepared print image data.

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9. A print method according to claim 8, wherein said enlargement split print process further comprises the steps of determining whether or not a blank page occurs and canceling print of the blank page if it is determined that a blank page occurs between the step of laying out the decompressed image data across pages and the step of printing based on the prepared print image data.

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10. A computer-readable record medium recording a program for printing read image data based on specified print

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setting, said program for providing on a computer the functions of:

reading an original image and converting the image into image data;

5 compressing the read image data and storing the compressed data;

reading the compressed image data and decompressing the data;

performing predetermined image processing for the image  
10 data based on the specified print setting, thereby preparing print image data; and

controlling compression and decompression timings of the image data in response to the contents of the image processing.

15 11. A record medium according to claim 10, wherein the function of compressing the read image data and storing the compressed data is adapted so that a plurality of print qualities can be used and the compression quality to be used can be selected in response to the contents of the image processing.

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